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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* MICHAEL ROSENBAUER and  
BERND SCHESSL

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Appeal 2009-015371  
Application 10/583,949  
Technology Center 1700

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Before CHUNG K. PAK, LINDA M. GAUDETTE, and  
MICHAEL P. COLAIANNI, *Administrative Patent Judges*.

COLAIANNI, *Administrative Patent Judge*.

DECISION ON APPEAL<sup>1</sup>

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<sup>1</sup> The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or for filing a request for rehearing, as recited in 37 C.F.R. § 41.52, begins to run from the “MAIL DATE” (paper delivery mode) or the “NOTIFICATION DATE” (electronic delivery mode) shown on the PTOL-90A cover letter attached to this decision.

Appeal 2009-015371  
Application 10/583,949

This is a decision on an appeal under 35 U.S.C. § 134 from the Examiner's final rejection of claims 11 through 27. We have jurisdiction pursuant to 35 U.S.C. § 6.

We AFFIRM-IN-PART.

#### STATEMENT OF THE CASE

The subject matter on appeal is directed to a dishwasher. Claims 11 and 26 are illustrative:

11. A dishwasher, comprising:

a container for retaining items to be subjected to a dishwashing operation; and

a controller for one of controlling an operating function effecting a switching on of the dishwasher, controlling an operating function effecting a switching off of the dishwasher, and selecting operational functions of the dishwasher, the controller including a touch-sensitive surface with switching functions allocated to an operating function, wherein the switching function of the touch-sensitive surface is actuatable by relatively light touching contact and the relevant operating function is thereby respectively switched off, switched on, or selected.

26. A dishwasher comprising:

a controller that controls the operation of the dishwasher; and

a touch-sensitive user interface in communication with the controller that is responsive to a change in an electromagnetic field.

The Examiner maintains the following rejections:

- 1) claims 11 and 13 under 35 U.S.C. § 102(b) as anticipated by Oyler (US 2003/0205954 A1, published Nov. 6, 2003);
- 2) claims 12 and 26 under 35 U.S.C. § 103(a) as unpatentable over Oyler and Kavanaugh (US 2001/0016886 A1, published Aug. 23, 2001);
- 3) claims 14, 17-20, and 23-25<sup>2</sup> under 35 U.S.C. § 103(a) as unpatentable over Oyler and Brueggemann (US 5,995,877, issued Nov. 30, 1999);
- 4) claims 15 and 21 under 35 U.S.C. § 103(a) as unpatentable over Oyler, Brueggemann, and Neugass ‘050 (US 2,791,050, issued May 7, 1957) as evidenced by dictionary.com (Definitions from Dictionary.com, <http://dictionary.reference.com/browse/matt> (last visited Apr. 29, 2008));
- 5) claims 16 and 22 under 35 U.S.C. § 103(a) as unpatentable over Oyler, Anderson (US 2004/0109096 A1, published Jun. 10, 2004), and Neugass ‘824 (US 2,660,824, issued Dec. 1, 1953); and
- 6) claim 27 under 35 U.S.C. § 103(a) as unpatentable over Oyler, Kavanaugh, and Brueggemann.

With respect to rejection (1), Appellants’ arguments focus on features recited in claim 11. Accordingly, we address Appellants’ arguments regarding the rejection with respect to claim 11 only. *See* 37 C.F.R. § 41.37(c)(1)(vii).

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<sup>2</sup> As is apparent from the record, the Examiner has withdrawn the § 103 rejection of claims 21 and 22 over Oyler and Brueggemann set forth in the Final Office Action mailed October 28, 2008. (Ans. 2).

With respect to rejection (2), Appellants argue the claims as a group. Accordingly, we address Appellants' arguments with respect to claim 26 only. *Id.*

With respect to rejection (3), Appellants' arguments focus on claim 24. Accordingly, we address Appellants' arguments regarding the rejection with respect to claim 24 only.<sup>3</sup> *Id.* In addition, with respect to rejection (3), for reasons evident below, also we address the rejection of claims 14, 17-20, 23, and 25.

With respect to rejections (4) and (5), Appellants advance no additional arguments and instead refer to their arguments made for claim 11 in rejection (1). (Br. 10-13). Therefore, dependent claims 15, 16, 21, and 22 in rejections (4) and (5) stand or fall with our decision regarding claim 11 in rejection (1).

#### *REJECTION (1)*

#### ISSUE

Did the Examiner reversibly err in determining that the phrase “the touch-sensitive surface is actuatable by relatively light touching contact” recited in claim 11 does not exclude Oyler’s membrane switch assembly, which requires pressure to actuate? We decide this issue in the negative.

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<sup>3</sup> We note that Appellants' arguments also focus on claims 12 and 27 however, these claims are not currently rejected in this rejection. Accordingly, Appellants' arguments that the Examiner improperly maintained the rejection of claims 12 and 27 under § 103 over Oyler and Brueggemann is irrelevant to this rejection.

## PRINCIPLES OF LAW, ANALYSIS, AND CONCLUSION

Appellants argue that Oyler's membrane switch assembly "must exert pressure on the touch surface in order to cause the substrate to flex and actuate. In stark contrast, [in] . . . the present invention[,] . . . no pressure needs to be exerted at all by the user." (Br. 6). In other words, Appellants argue that the "*the touch-sensitive surface is actuatable by relatively light touching contact*" phrase recited in claim 11 excludes Oyler's membrane switch assembly, which requires pressure to actuate. (emphasis added).

It is well settled that "[d]uring examination, 'claims . . . are to be given their broadest reasonable interpretation consistent with the specification, and . . . claim language should be read in light of the specification as it would be interpreted by one of ordinary skill in the art.'" *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004).

In this case, while Appellants' Specification (Spec. para. [006]) discloses that its touch-sensitive surface actuates via a change in an electromagnetic field by means of capacitor or an infrared light barrier, Appellants have not directed us to any disclaimer in the Specification of a touch-sensitive surface that actuates via pressure such as in Oyler's membrane switch assembly.

Indeed, paragraph [011] of the Specification discloses in one embodiment that the touch-sensitive surface's covering can "consist at least in part of a metal film which is sufficiently flexible to transfer the *pressure* exerted on the metal film to the relevant touch-sensitive surface of the controller." (emphasis added). In other words, the Specification discloses in one embodiment that its touch sensitive surface requires pressure to actuate.

Thus, giving the claim term “the touch-sensitive surface is actuatable by relatively light touching contact” its broadest reasonable interpretation consistent with the Specification, we determine that this term does not exclude Oyler’s membrane switch assembly, which requires pressure to actuate.<sup>4</sup> *See also In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004) (stating that “[a]bsent claim language carrying a narrow meaning, the PTO should only limit the claim based on the specification or prosecution history when those sources expressly disclaim the broader definition.”).

Accordingly, we sustain the Examiner’s rejection of claims 11 and 13 under § 102(b) over Oyler. We further sustain the Examiner’s § 103 rejections of claims 15 and 21 over Oyler, Brueggemann, and Neugass ‘050 as evidence by dictionary.com and claims 16 and 22 over Oyler, Anderson and Neugass ‘824 for the same reasons.

## **REJECTION (2)**

### **ISSUE**

Did the Examiner reversibly err by failing to provide a reason to combine Oyler and Kavanaugh to arrive at the invention recited in claim 26 within the meaning of § 103(a)? We decide this issue in the negative.

### **PRINCIPLE OF LAW**

As stated by our reviewing court:

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<sup>4</sup> We note that our interpretation is consistent with the relevant prior art. In this regard, we note that Kavanaugh teaches that its touch sensitive system may be “pressure sensitive” or “non-pressure sensitive.” (Kavanaugh, para. [0088]).

An obviousness determination is not the result of a rigid formula disassociated from the consideration of the facts of a case. Indeed, the common sense of those skilled in the art demonstrates why some combinations would have been obvious where others would not. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 127 S.Ct. 1727, 1739, 167 L.Ed.2d 705 (2007) (“The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.”). . . . Applying modern electronics to older mechanical devices has been commonplace in recent years. . . . One of ordinary skill in the art . . . would have found it obvious to . . . update . . . [the prior art device by] using modern electronic components in order to gain the commonly understood benefits of such adaptation, such as decreased size, increased reliability, simplified operation, and reduced cost. . . . The combination is thus the adaptation of an old idea or invention . . . using newer technology that is commonly available and understood in the art.

*Leapfrog Enter., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1161-62 (Fed. Cir. 2007).

#### ANALYSIS AND CONCLUSION

Appellants argue that the Examiner fails to provide an adequate rationale for combining Oyler and Kavanaugh because the Examiner’s reason for combining the prior art references is merely a conclusory statement. (Br. 7). Specifically, Appellants argue that there is no reason to combine the references because Oyler is concerned with “providing an escutcheon that is separately molded from the remainder of the dishwasher door and, therefore, increasing the complexity of assembly and the cost of manufacture of a dishwasher” while Kavanaugh is concerned with “electronic devices becoming smaller in size which adversely impacts their

ease of operation due to, for example, reduced-sized keys, reduced-size displays and/or reduced number of keys.” (Br. 8 and 9).

We disagree with Appellants’ argument for the reasons provided by the Examiner at pages 3 through 5 of the Answer.

In this regard, Oyler teaches the use of a control panel comprising an electronic membrane switch assembly having touch sensitive selection keys (corresponding to the claimed “touch-sensitive user interface in communication with the controller” feature). (Oyler, para. [0025]).

Appellants acknowledge that “a user of a membrane switch must exert pressure on the touch surface in order to cause the substrate to flex and actuate.” (Br. 6). In other words, Oyler teaches an electronic membrane switch assembly that is responsive to pressure.

Oyler, however, does not explicitly teach that its electronic membrane switch assembly is responsive to a change in an electromagnetic field as required by claim 26.

Appellants do not specifically dispute the Examiner’s finding that Kavanaugh teaches “a non-pressure sensitive touch sensitive . . . [display] that relies on electromagnetic induction (hence a[n] electromagnetic field) to determine the user function selections.” (*Compare Br. 7-9 with Ans. 5*).

Thus, in reference to our above discussion, we agree with the Examiner’s determination that it would have been within the skill level of one of ordinary skill in the art to substitute Kavanaugh’s non-pressure sensitive display that is responsive to electromagnetic induction for the components of Oyler’s electronic membrane switch assembly, which includes Oyler’s touch sensitive selection keys, that is responsive to pressure. Such a modification is merely an adaptation of older mechanical

technology using newer modern electronics that are commonly available and understood in the art, and thus would have been obvious. *See Leapfrog*, 485 F.3d at 1161 (stating that “[a]pplying modern electronics to older mechanical devices has been commonplace in recent years”).

Accordingly, we sustain the Examiner’s rejection of claims 12 and 26 under § 103(a) over Oyler and Kavanaugh.

*REJECTION (3)*

Claim 24

Claim 24 recites, “[t]he dishwasher of claim 18, wherein the touch-sensitive surface is controllably illuminated in steps.” Appellants argue that

none of the applied references teaches or suggests the features of the claimed invention including a controller with a touch-sensitive surface that is controllably illuminated in steps as recited by claim[] 24 . . . . The Office Action cites column 3, line 1 - column 4, line 45 of the Brueggemann et al. reference in an attempt to support the allegation that the Brueggemann et al. reference discloses this feature. However, contrary to this allegation, column 3, line 1 - column 4, line 45 does not teach or suggest anything at all regarding controllably illuminating a touch-sensitive surface in steps as recited by claim[] 24.

(Br. 10). We agree.

We begin by noting that the Specification defines the “controllably illuminated in *steps*” limitation recited in claim 24 as controlling the *luminous intensity* of the individual lamps to signify, for example, different stages of an operating function. (Spec. para. [013]) (emphasis added).

Turning our attention to the Examiner’s rejection, while the Examiner directs (Ans. 6) us to Brueggemann column 3, line 1 to column 4, line 45 for a teaching of the disputed claim feature, this portion of Brueggemann teaches a controller that controls the *color* of the light illuminating from the light source. This portion of Brueggemann, however, does not disclose a touch-sensitive surface that controls the *luminous intensity* of the individual lamps as required by claim 24.

Indeed, the Examiner simply fails to direct us to any credible evidence or articulate a persuasive reason as to why any of the applied prior art references teaches or would have suggested the claimed invention having this disputed claim feature.

Accordingly, we reverse the Examiner’s rejection of claim 24 under § 103 over Oyler and Brueggemann.

#### Claims 14, 17-20, 23, and 25

In reference to our above discussion, Appellants’ arguments are directed to the “touch-sensitive surface is controllably illuminated in steps” feature recited in claim 24, however, none of claims 14, 17-20, 23, and 25 require this feature.

Moreover, Appellants neither specifically dispute the Examiner’s findings or the Examiner’s reasons for combining Oyler and Brueggemann to arrive at the inventions recited in claims 14 and 17-20, 23, and 25. (*Compare Ans. 5-6 with Br. 9-10*).

Accordingly, we sustain the Examiner’s rejection of claims 14, 17-20, 23, and 25 under § 103 over Oyler and Brueggemann.

***REJECTION (6)***

With respect to rejection (6), the Examiner relies on the same factual findings and determinations based on Brueggemann discussed above with respect to the “controllably illuminated in steps” feature recited in claim 27 and does not provide any additional findings or determinations as to how Kavanaugh would have satisfied the disputed claim feature. Therefore, for the reasons stated above, we reverse the Examiner’s rejection (6).

**ORDER**

In summary,

- i) the rejection of claims 11 and 13 under § 102(b) over Oyler is affirmed;
- ii) the rejection of claims 12 and 26 under § 103(a) over Oyler and Kavanaugh is affirmed;
- iii) the rejection of claims 14, 17-20, 23, and 25 under § 103(a) over Oyler and Brueggemann is affirmed;
- iv) the rejection of claim 24 under § 103(a) over Oyler and Brueggemann is reversed;
- v) the rejection of claims 15 and 21 under § 103(a) over Oyler, Brueggemann, and Neugass ‘050 and dictionary.com is affirmed;
- vi) the rejection of claims 16 and 22 under § 103(a) over Oyler, Anderson, and Neugass ‘824 is affirmed; and
- vii) the rejection of claim 27 under § 103(a) over Oyler, Kavanaugh, and Brueggemann is reversed.

**TIME PERIOD**

Appeal 2009-015371  
Application 10/583,949

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1).

**AFFIRMED-IN-PART**

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